

# Base Realignment and Closure (BRAC) Cleanup Team Workshop

Health and Environmental  
Risk Communication

# Health and Environmental Risk Communication

Presenter: Lori Geckle

Risk Communication Team

U.S. Army Center for Health Promotion and  
Preventive Medicine

Phone (410) 612-7709; Fax (410) 671-8170

CHPPM on the Web @ [chppm-www.apgea.army.mil](http://chppm-www.apgea.army.mil)

# Why Risk Communication?

- Scientists and engineers were having a difficult time communicating study results effectively, resulting in:
  - Failure to alleviate public concern
  - Failure to address customer concerns
  - Requirement to complete additional studies

# Low Trust and/or High Concern

- Results in limited attention/retention
  - 15% - 20% efficiency
- Why?
  - Denial of issue
  - Trauma from issue
  - Competing agendas
  - Emotional arousal

# Implications of Limited Attention/Retention

- Limited number of messages
- Repetition of messages
- Time limitations

# Key Community Concerns

- Health
- Economics
- Aesthetics
- Process
- Safety
- Environment
- Fairness/Equity
- Legal Issues

# Ethical Principles

- Risk Communication tools and techniques should not be used to mislead people about ourselves or others
- Risk Communication tools and techniques should not be used to mislead people about any issues
- We should not unnecessarily raise the level of concern for any party

# Three Key Messages

- $P = R$ 
  - Perception *IS* Reality
- $G = T + C$ 
  - Our Goal is to establish Trust and Credibility
- $C = S$ 
  - Communication is a Skill



# Perception - Jargon

- Groundwater
- Remediation
- CDC
- Fugitive emissions
- Toxicologist
- Industrial hygienist
- 10E-6
- Exceed the standard
- Below the standard
- “Leachate that is leaching into the groundwater that is migrating off site in a plume”

# Perception - Risk Weighting Factors

| <i><u>Factor</u></i>     | <i><u>Weight</u></i> |
|--------------------------|----------------------|
| Trust.....               | 2000                 |
| Benefit.....             | 1000                 |
| Control (Voluntary)..... | 1000                 |
| Fairness (Share).....    | 500                  |
| Alternatives.....        | 500                  |
| Catastrophe.....         | 300                  |

# Perception - Four Hit Theory of Belief Formation

- Once formed, beliefs are very difficult to change
- Four (on average) unanswered credible hits of information will support belief formation
- Hits from one side can negate hits from the other side
- One negative = Three positive
- After first hit - 48 hours of active search

# Perception - Negatives

$$N = 3P$$

# Perception - Negatives

- Repetition of a negative allegation or accusation, even when refuted, results in reinforcement and reaffirmation of the initial allegation or accusation

# Perception - Negatives

- Negative words to avoid:
  - No
  - Not
  - Never
  - Nothing
  - None

# Perception - Negatives

- Negative words/phrases
  - Contamination
  - Pollution
  - Toxic
  - Dangerous
  - Concern
  - Any words or phrases with strong negative connotations

# Non-Verbal Communication

- Can provide up to 50% - 75% of message content
- Noticed intensely by the audience
- Interpreted negatively
- Overrides verbal communication

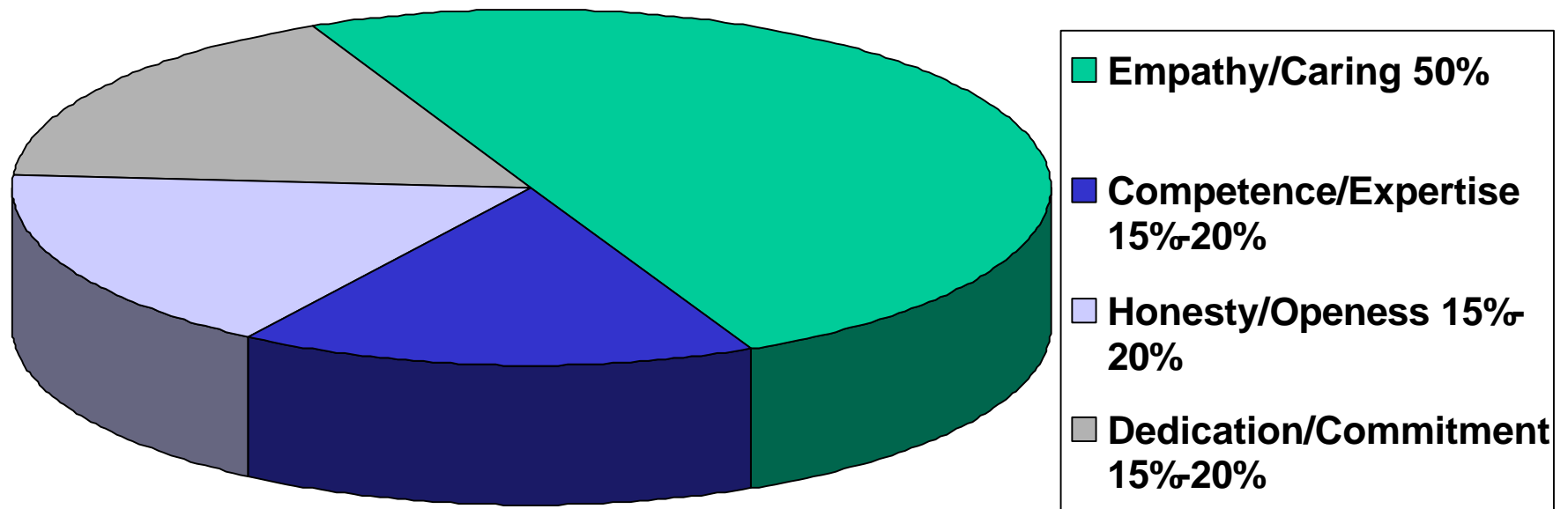


# Non-Verbal Communication

- Eyes
  - Eye contact
  - Where to look
- Hands
  - Visible, open palm
- Posture
  - 5° forward of vertical

# Trust and Credibility

**Trust and Credibility Factors  
(Low Trust and/or High Concern)**



# Trust and Credibility

- Credibility Transference
  - A lower credibility source takes on the credibility of the highest credible source that agrees with its position on an issue

# Trust and Credibility

- Credibility Reversal
  - When a lower credibility source attacks the credibility of a higher credibility source, the lower credibility source loses more credibility
  - The only information source that can effectively attack the credibility of another information source, is an information source of equal or higher credibility

# Trust and Credibility

- The G4 or Critical Mass Theory of Government Credibility Transfer
  - The sum total of the credibility of any four government agencies is substantially greater than the sum total of the credibility of the individual agencies

# Communication Skills

- Seven Part Communication Structure
  - Empathy/Caring or statement of commitment
  - State three key messages
    - Key message 1 with two supporting facts
    - Key message 2 with two supporting facts
    - Key message 3 with two supporting facts
  - Repeat three key message
  - Provide future actions

# Communication Skills

- The “Level 6” Answer
  - 1. Express empathy/concern
  - 2. Provide a 7-12 word soundbite conclusion
  - 3. Provide supporting fact #1
  - 4. Provide supporting fact #2
  - 5. Repeat conclusion exactly as stated before
  - 6. Provided future action

# Communication Skills

- Answering difficult questions
  - “Declared Victory”
  - “Commitment”



# Communication Skills

- Hedging words to avoid:
  - Maybe
  - Possibly
  - Perhaps
  - Depending

# Communication Skills

Public Meetings

VS.

Open Houses

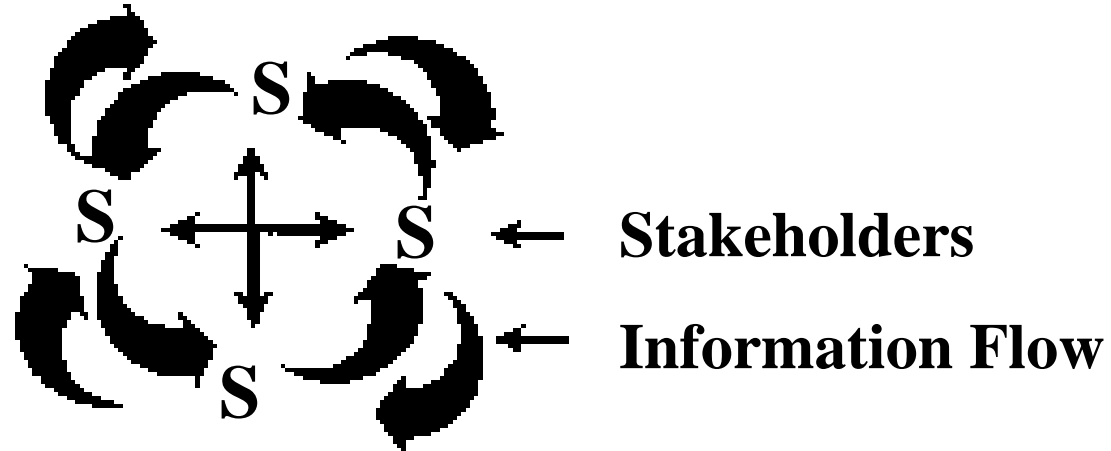
# Effective Public Meetings

- Moderator
- Anticipated issues/questions
- Presentation skills

# Public Meeting Guidelines

- Interruptions
- Number/duration of comments or questions
- Agenda/adjournment

# Public Dialogue Model



# Exhibit & Public Discussion

- Potential Uses
  - Use immediately prior to and/or after scheduled public meeting
  - Use as supplement to or substitute for public meeting

# Exhibit & Public Discussion

- Logistics
  - Present information in four to six exhibits
  - Schedule for four to six hours duration
  - Arrange posters to highlight key messages:
    - Use three key messages
    - Put one key message per central poster
    - Have supplemental material on side posters
  - Space exhibits around meeting area to enhance discussions

# Exhibit & Public Discussion

- Logistics (cont.)
  - Have trained presenters at each exhibit
  - Use master presenter for crisis intervention/difficult situations/quality control
  - Invite outside independent experts
  - Consider inviting participation by special/public interest groups
  - Provide method for public to leave comments



# Exhibit & Public Discussion

- Logistics (cont.)
  - Discourage clustering of presenters
  - Ensure presenters maintain appropriate decorum
  - Schedule for day of week convenient for local community or target audience
  - Arrange for refreshments
  - Invite opinion leaders as attendees
  - Provide assistance for people with special needs

# Elements of Poster Stations

- Illustration/Graphics
  - (4-6 grade level)
- Conclusion/Sound bite
  - (6-8 grade level; 7-12 words; large letters)
- Executive summary/Supporting facts
  - (6-8 grade level; 5-7 lines; large letters)
- Detailed description
  - (8-12 grade level; 15-20 lines)
- Table documentation/Supporting information
  - (positive executive statement; legal documentation)

# Elements of Poster Stations

- Expert presenter trained in environmental risk communication
- Handouts/take away information
- Log for recording comments
- Stenographer/tape recorder/interpreter
- Simple color design